ADAPTIVE DETERMINISTIC GROUPING OF BLOCKS INTO MULTI-BLOCK STRUCTURES

ABSTRACT OF THE DISCLOSURE

The present invention presents techniques for the linking of physical blocks of a non-volatile memory into composite logical structures or "metablocks". After determining an initial linking of good physical blocks into metablocks, a record of the linking is maintained in the non-volatile memory where it can be readily accessed when needed. In one set of embodiments, the initially linking is deterministically formed according to an algorithm and can be optimized according to the pattern of any bad blocks in the memory. As additional bad blocks arise, the linking is updated using by replacing the bad blocks in a linking with good blocks, preferably in the same sub-array of the memory as the block that they are replacing.